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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/810,603	03/19/2001	Takayuki Kurata	Q62420	8802

7590 03/04/2003

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EXAMINER
DEJESUS, LYDIA M

ART UNIT	PAPER NUMBER
2859	

DATE MAILED: 03/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Applicati n No. 09/810,603	Applicant(s) KURATA, TAKAYUKI
	Examiner Lydia M. De Jesús	Art Unit 2859

-- Th MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 December 2002* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *17-20* is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 March 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-10 are finally rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: measuring the temperature of the tire tread surface part and positively reciting as part of the claimed method the step of causing the tire to come into contact with, and to be run on, a road surface.

Claims 2-10 are rejected due to their dependence upon claim 1.

3. Claims 11-16 are finally rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 11 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: a structural element for forecasting tire tread wear, such that the claimed apparatus performs the function recited in the preamble.

Claims 12-16 are rejected due to their dependence upon claim 11.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claim 11 and 14 are finally rejected under 35 U.S.C. 102(b) as being anticipated by Williams.

Williams discloses a tire fault detecting apparatus comprising: a tire support, shown in Figure 1, a road surface [24], means for driving the road surface (see col. 3 lines 24-26), and means [25] for measuring, without contact, the temperature of the tire. Said apparatus further comprises a display part i.e., monitor oscilloscope.

With respect to the preamble of the claim: the preamble of the claim is insufficient to patentably distinguish the claimed apparatus form the apparatus disclosed by Williams because it has been held that a preamble is denied the effect of a limitation where the claim is drawn to a structure and the portion of the claim following the preamble is a self-contained description of the structure not depending for completeness upon the introductory clause. Kropa v. Robie, 88 USPQ 478 (CCPA 1951). In this case, the claim fails to set forth a structural element for forecasting tire tread wear, such that the claimed apparatus performs the function recited in the preamble.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Allowable Subject Matter

7. Claims 17-20 are allowed.

8. Claims 1-10 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

9. Claims 12, 13, 15 and 16 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

10. The following is a statement of reasons for the indication of allowable subject matter:

Claim 1 has been found to be allowable over the Prior Art of record because the Prior Art of record fails to teach or suggest a method forecasting tire tread wear comprising the step of forecasting tire tread wear on a tire based on an increase in temperature of a tread surface part of the tire are based on a temperature of the tread surface part after increasing the temperature of the tread surface part, in combination with the remaining limitations of said claim.

Claims 2-10 have been found to be allowable over the Prior Art of record due to their dependence upon claim 1.

Claim 12, has been found to be allowable over the Prior Art of record because the Prior Art of record fails to teach or suggest a tire tread wear forecasting apparatus comprising a calculating device for calculating temperature differences of the temperature measurement

results from a first temperature measurement and a second temperature measurement at temperature measurement locations, in combination with the limitations of claim 11 and the remaining limitations of claim 12.

Claim 13 has been found to be allowable over the Prior Art of record because the Prior Art of record fails tot each or suggest a tire tread wear forecasting apparatus comprising a compensator that corrects at least the measured temperature based on the length of the tire contact surface, in combination with the limitations of claim 11 and the remaining limitations of claim 13.

Claim 15 has been found to be allowable over the Prior Art of record because the Prior Art of record fails to teach or suggest a tire tread wear forecasting apparatus comprising, in combination with the limitations of claim 11, means for cooling the tire.

Claim 16 has been found to be allowable over the Prior Art of record because the Prior Art of record fails to teach or suggest a tire tread wear forecasting apparatus comprising, in combination with the limitations of claim 11, means for heating the road surface.

Claim 17 has been found to be allowable over the Prior Art of record because the Prior Art of record fails to teach or suggest a tire wear forecasting method comprising the step of measuring a temperature of the tire or an increase in the temperature of the tire and forecasting wear of the tire based on a result of said measuring step, in combination with the remaining limitations of said claim.

Claim 18 has been found to be allowable over the Prior Art of record due to its dependence upon claim 17.

Claim 19 has been found to be allowable over the Prior Art of record because the Prior Art of record fails to teach or suggest a tire tread wear forecasting apparatus comprising a

computer which forecasts tread wear on the tire based on the temperature sensed by said sensor, in combination with the remaining limitations of said claim.

Claim 20 has bee found to be allowable over the Prior Art of record due to its dependence upon claim 19.

Response to Arguments

11. Applicant's arguments with respect to the rejection of claim 11 over Williams have been fully considered but they are not persuasive. In this case, the preamble of the claim is insufficient to patentably distinguish the claimed apparatus from the apparatus disclosed by Williams because Williams discloses the structural limitations recited in the body of the claim and further since the claim fails to set forth a structural element for forecasting tire tread wear, such that the claimed apparatus performs the function recited in the preamble.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lydia M. De Jesús whose telephone number is (703) 306-5982.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego F.F. Gutierrez can be reached on (703) 308-3875. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 305-3431 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

Diego F.F. Gutierrez
Supervisory Patent Examiner
Technology Center 2800

LDJ
February 27, 2003

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Patent and Trademark Office
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Washington, D.C. 20231

09/810603

APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.

EXAMINER	
ART UNIT	PAPER
	7

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